

WHAT IS CLAIMED IS:

5 1. A method for the secure printing of
print data from a client application residing on a
data network to a set top box which has a printer,
said set top box residing on a digital cable network
which has a cable head end for interfacing said
digital cable network to said data network, said
method comprising the steps of:

10 generating print data in said client
application;

determining whether a secure communication
path exists between said client application and said
set top box;

15 transmitting, in response to a
determination that said secure communication path
exists, said print data from said client application
to said set top box; and

20 sending said print data from said set top
box to said printer for printing.

25 2. A method according to Claim 1, wherein
the step for determining whether a secure
communication path exists between said client
application and said set top box includes the use of
a secure protocol between said client application
and said cable head end, and between said cable head
end and said set top box.

30 3. A method according to Claim 2, wherein
the step for determining whether a secure
communication path exists between said client
application and said set top box further includes a
confirmation through said secure protocol, that said
35 cable head end is a secure location, and a
confirmation, through said secure protocol, that
said set top box is a secure location.

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5 4. A method according to Claim 1, wherein
the step for transmitting, in response to a
determination that said secure communication path
exists, said print data from said client application
to said set top box includes sending said print data
from said client application to said cable head end
in a device-independent format, transforming said
print data from said device-independent format to a
10 rasterized format which corresponds to said printer,
and then sending said print data in said rasterized
format from said cable head end to said set top box
for printing on said printer.

15 5. A method according to Claim 1, wherein
the set for transmitting, in response to a
determination that said secure communication path
exists, said print data from said client application
to said set top box includes encrypting said print
data, sending said encrypted print data from said
20 client application to said cable head end, sending
said encrypted print data from said cable head end
to said set top box, decrypting said print data, and
sending the decrypted print data to said printer for
printing.

25 6. A method according to Claim 3, wherein
said confirmation that said set top box is a secure
location is sent from said set top box to said cable
head end.

30 7. A method according to Claim 3, wherein
said confirmation that said cable head end is a
secure location is sent from said cable head end to
said client application.

35 8. A method according to Claim 1, wherein
the step for transmitting, in response to a

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5 determination that said secure communication path
exists, said print data from said client application
to said set top box includes transforming, by said
client application, said print data from said
device-independent format to a rasterized format
which corresponds to said printer, sending said
print data in said rasterized format from said
client application to said cable head end, and then
10 sending said print data in said rasterized format
from said cable head end to said set top box for
printing on said printer.

15 9. A method according to Claim 2, wherein
said secure protocol is a secure sockets layer
protocol.

20 10. A method according to Claim 2, wherein
the step for determining whether a secure
communication path exists between said client
application and said set top box includes the
transmission of at least one certificate from said
set top box to said cable head end and the
transmission of at least one certificate from said
cable head end to said client application.

25 11. A method for the secure printing of
print data from a client application residing on a
data network to a set top box which has a printer,
said set top box residing on a digital cable network
30 which has a cable head end for interfacing said
digital cable network to said data network, said
method comprising the steps of:

35 generating print data in said client
application;
determining that a secure communication
path exists between said client application and said
cable head end upon receipt through a secure

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protocol of a confirmation from said cable head end that said cable head end is a secure location;

5 sending, in response to a determination that said secure communication path exists, said print data from said client application to said cable head end in a device-independent format;

transforming in said cable head end, said print data from said device-independent format to a rasterized format which corresponds to said printer;

10 determining that a secure communication path exists between said cable head and said set top box upon receipt, through a secure protocol, of a confirmation from said set top box that said set top box is a secure location; and

15 sending, in response to a determination that said secure communication path exists, said print data in said rasterized format from said cable head end to said set top box for printing on said printer.

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12. A method for the secure printing of print data from a client application residing on a data network to a set top box which has a printer, said set top box residing on a digital cable network which has a cable head end for interfacing said
25 digital cable network to said data network, said method comprising the steps of:

generating print data in said client application;

30 transforming, in said client application, said print data from said device-independent format to a rasterized format which corresponds to said printer;

35 encrypting, in said client application, said print data in said rasterized format;

5 sending said encrypted print data in said rasterized format from said client application to said cable head end;

5 sending said encrypted print data in said rasterized format from said cable head end to said set top box; and

10 decrypting, in said set top box, said print data in said rasterized format for printing on said printer.

10 13. An apparatus for the secure printing of print data from a client application residing on a data network to a set top box which has a printer, said set top box residing on a digital cable network which has a cable head end for interfacing said digital cable network to said data network, comprising:

15 a program memory for storing process steps executable to perform a method according to any of Claims 1 to 12; and

20 a processor for executing the process steps stored in said program memory.

25 14. Computer-executable process steps stored on a computer readable medium, said computer-executable process steps for the secure printing of print data from a client application residing on a data network to a set top box which has a printer, said set top box residing on a digital cable network which has a cable head end for interfacing said digital cable network to said data network, said computer-executable process steps comprising process steps executable to perform a method according to any of Claims 1 to 12.

35 15. A computer-readable medium which stores computer-executable process steps, the

computer-executable process steps to achieve the secure printing of print data from a client application residing on a data network to a set top box which has a printer, said set top box residing on a digital cable network which has a cable head end for interfacing said digital cable network to said data network, said computer-executable process steps comprising process steps executable to perform a method according to any of Claims 1 to 12.

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